# State of North Carolina
## Office of Information Technology Services

**Michael F. Easley, Governor**                    **George Bakolia, State Chief Information Officer**

October 23, 2006

<u>Memorandum</u>

**To:**          George Bakolia

**From:**       Tom Runkle for Review Team

**Subject:**    Agency IT Plans – Observations From Reviews

Per state statutes, agencies are mandated to submit biennial IT plans for review prior to the preparation of the State CIO's plan.  Denny McGuire, Jim Tulenko, Charles Richards, Barbara Swartz, and I have completed reviews of the plans that have been submitted to date.  In general, the plans are much improved over the previous ones, and several statewide needs that require an enterprise approach are listed.  The balance of this memorandum summarizes the observations from the reviews.

## Better Management of IT

The following three observations address areas associated with the better planning, budgeting, and management of IT.

<u>Linkage of IT Initiatives with Business Strategies and Governmental Priorities</u>

Considering their performance in preparing past plans, several agencies are "getting it".  Their plans reflect close working relations with business areas, a thorough understanding of business environments and drivers, and a commitment to customer focus and citizen service. They have disciplined IT governance structures, make good use of available software tools to support key management processes, and attempt to follow best practices for the management of IT.  Both large and small agencies are represented in this group.

However, the plans of many agencies indicate a struggle with the ability to manage their IT resources adequately, perform management functions in an effective and efficient manner, and deliver appropriate technology services and capabilities to the business areas.  A common theme for these plans is the appearance that IT staff developed them with little or no input or assistance from the business areas.  Although agency strategic initiatives and business drivers are documented in them, these plans reflect a lack of business input in the analyses of present and required future IT capabilities, the evaluations of management functions, and the selection

and priority setting of IT initiatives. The lack of clear and appropriate business perspectives throughout the planning process may have contributed to the vagueness in the ties between IT initiatives and business needs.

<u>Priority Setting of Initiatives</u>

Several plans reflect a good understanding of business needs and drivers, adequate analyses of present and required capabilities for IT processes and assets, and disciplined and structured processes for selecting and prioritizing IT initiatives. Priority setting seems to reflect the use of appropriate criteria, and this endeavor was performed on an agency-wide basis. The IT initiatives are listed in priority order.

Many agencies did a thorough job of analyzing IT management areas and asset capabilities and listing needs and requirements. However, the results from the evaluation, selection, and priority setting of initiatives do not reflect the same care and attention for this process. Moreover, for some agencies, there appear to be two priority-setting activities – one for the management of applications and another for the other management and asset areas. Therefore, a consolidated list of prioritized IT initiatives is not provided.

Some agencies present a 'laundry list' of needs and wants from their analyses of management areas and assets, and they incorporate all of these in the IT initiatives. Therefore, the IT initiatives list is unreasonable, as it contains items beyond the fiscal and personnel capacities of the agencies to accomplish. When combined with the lack of priority setting described above, the list of initiatives appears to be totally overwhelming.

The inattention to the function of selecting and prioritizing initiatives may have several causes. These include not allowing sufficient time for this work, lack of sufficient business involvement in the priority setting part of the planning effort, and/or lack of an agency wide business/IT governance (decision making) process to perform this activity.

<u>Impact of Statewide Management Tools</u>

The positive impact of available statewide IT management tools is clearly evident in the plans. All used APM information, and some give listings directly form the software tool of key analysis factors and/or management intentions (roadmaps) over the planning horizon. Project portfolio information is referenced by many in their determinations of future actions for present projects.

Conversely, the negative impact due to the absence of an automated asset management system is obvious. The analyses of infrastructure assets are clearly below the quality of the analyses of applications. Several agencies admit that they do not have an asset management capability, and it is needed. The smaller agencies performing this function manually say it is taking an inordinate amount of time and effort.

**Common Enterprise Needs**

The following statewide items appear in many of the plans, as serious intentions to pursue, something being looked at for possible future action, or as an area of concern regarding how it will affect them or their ability to afford or participate.

- ITIL – a few indicate serious consideration for implementing; others seem to mention it as a 'magic word' that they thought must be included.

- Security – a common area of concern regarding the ability to perform adequately and the need for additional assistance.

- NCID – several stated an intention to implement or continue to incorporate as it matures.

- Disaster recovery and BCP – another common area of concern regarding the ability to perform appropriately. (The new COOP requirements may be the source of concerns in this area.)

- Asset management – a need stated by many, and one large agency (unaware of our initiative) stated an intention to purchase a package.

- Data warehouse and business intelligence tools – several state intentions to participate or continue to take part in the statewide initiative.

- Service/help desk – a few indicate a desire to make use of a common statewide system.

- Document management – mentioned as a need by many. (This is surprising to us, as we were under the impression that Gary Alexander was experiencing resistance to his proposed EDM service.)

- BEACON, ESAP, and career banding – despite good communications for these projects/initiatives, they are mentioned by several agencies as unsure of the impact on the agency and/or the agency's ability to fund.

- Support of the mobile workforce and telework – several mention this capability as an emerging requirement for IT to implement.

- GIS – the role of One Map versus Google Earth.

- Voice over IP – especially for call centers.

- Network infrastructure – necessity to replace old wiring, switches, routers, etc. and the lack of funding to do so.

- Web content management – seems to be a growing requirement.

**Initiatives or Needs Applicable to Multiple Agencies**

The attached Possible Coordinated Initiatives list is an extraction of agency initiatives that appear in multiple plans and may offer potential for the development of common consolidated approaches; thereby, leveraging fixed costs and minimizing duplication of efforts and expenses.

**Other Observations**

The following observations may be of interest.

- Agencies appear to be making progress in replacing contract staff with permanent state positions. The past successes are stated in the plans, and intentions to proceed with

this effort are indicated.  However, several agencies mention concerns with the present staffing contracts.

- There appears to be a large pent-up demand for IT services and associated assets and projects to fulfill these.  This may be due to the fact that we encouraged them to evaluate their capabilities and requirements fully in light of the ability to meet present and envisaged business needs.  Many agencies did this, and the results (as indicated by the initiatives) are impressive in number and costs.

- The positive educational effect of the TPG is obvious.  With few exceptions, the members of this group produced respectable IT plans.  The depth of analyses and focus of initiatives reflect a good understanding of the principles and practices of IT management.  Membership in this group, however, was not a prerequisite for the preparation of better IT plans, as several smaller agencies also provided more acceptable documents.

We will be glad to respond to any questions you may have or perform further reviews you may request.

**Review Notes from Agency IT Plans**
**Possible Coordinated Initiatives**

Cost Accounting for IT Projects-Chargebacks
- ✓ DENR working with UNC SOG on this
- ✓ DHHS looking to replace NIKU for staff tracking

Conference Package—registration, payment, credentials
- ✓ Justice
- ✓ Commission of Banks
- ✓ Auditor
- ✓ Insurance

Grants Tracking
- ✓ CCPS
- ✓ DPI

Case Management (Insurance—(Aithent) and DJJDP already have Case Management Software)
- ✓ CCPS
- ✓ Corrections
- ✓ DHHS
- ✓ OAH—should coordinate with Industrial Commission. Their cases are similar in scope.

CRM
- ✓ Treasurer
- ✓ Commerce

Mobile Data Encryption/Telework/Wireless
- ✓ Treasurer
- ✓ Auditor

Scheduling of Staff—7 X 24 operations create different needs.
- ✓ Correction
- ✓ DHHS
- ✓ DPI

Staff Training Management
- ✓ Correction
- ✓ Justice

Data Recovery from bad disks
- ✓ State

Data Archiving
- ✓ State

Document Management
- ✓ Correction
- ✓ DHHS
- ✓ DPI
- ✓ Treasurer

Spatial – GIS
- ✓ Auditor
- ✓ DENR
- ✓ Commerce
- ✓ CCPS

**POSSIBLE COORDINATED INITIATIVES**

| | Cost Accounting | Conference (registration, payment) | Grants Tracking | Case Management | CRM | Mobile Data/Telework /Wireless | Staff Scheduling | Staff Training | Data Recovery | Data Archives | Document Management | Data Warehouse | Spatial Data |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Administration, Department of | | | | X | | | | | | | | | |
| Administrative Hearings, Office of | | | | | | | | | | | | | |
| Agriculture and Consumer Services, Department of | | X | | | | | | | | | | | X |
| Auditor, Office of the State | | | | | | X | | | | | | | |
| Budget and Management, Office of State | | | | | | | | | | | | | |
| Commerce, Department of | | | | | X | | | | | | | | X |
| Controller, Office of the State | | | | | | | | | | | | | |
| Correction, Department of | | | | X | | | X | X | | | X | | X |
| Crime Control and Public Safety, Department of | | | X | X | | | | | | | | | X |
| Cultural Resources, Department of | | | X | X | | | | | | | | | X |
| Employment Security Commission | | | | | | | | | | | | | |
| Environment and Natural Resources, Department of | X | | | | | | | | | | | | X |
| Health and Human Services, Department of | X | | | X | | | | | | | | | |
| Insurance, Department of | X | X | | | | | X | | | | X | | |
| Justice, Department of | | X | | | | | | X | | | | | |
| Juvenile Justice and Delinquency Prevention, Department of | | | | | | | | | | | | X | |
| Labor, Department of | | | | | | | | | | | | | |
| North Carolina Community Colleges | | | | | | | | | | | | | |
| Personnel, Office of State | | | | | | | | | | | | | |
| Public Instruction, Department of | | | X | | | | X | | | | X | | |
| Revenue, Department of | | | | | | | | | | | | | |
| Secretary of State, Department of the | | | | | | | | | X | X | | | |
| State Board of Elections | | | | | | | | | | | | | |
| Transportation, Department of | | | | | X | X | | | | | | | |
| Treasurer, Department of the State | | | | | | X | | | | | X | | |
| Wildlife Resources Commission | | | | | | | | | | | | | |